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L1: Entry 1 of 3

File: USPT

Aug 29, 2000

US-PAT-NO: 6112241

DOCUMENT-IDENTIFIER: US 6112241 A

TITLE: Integrated network interconnecting device and probe

DATE-ISSUED: August 29, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Abdelnour; George Michel	Raleigh	NC		
Linville; John Walter	Durham	NC		
Suffern; Edward Stanley	Chapel Hill	NC		
Warren; Jeffrey Robert	Apex	NC		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines Corporation	Armonk	NY			02

APPL-NO: 08/ 955276 [\[PALM\]](#)

DATE FILED: October 21, 1997

INT-CL: [07] [G06](#) [F](#) [15/173](#)

US-CL-ISSUED: 709/224; 709/217, 709/249, 370/218, 370/219, 370/220, 370/233

US-CL-CURRENT: [709/224](#); [370/218](#), [370/219](#), [370/220](#), [370/233](#), [709/217](#), [709/249](#)

FIELD-OF-SEARCH: 395/200.54, 395/200.47, 395/200.79, 364/550, 364/551.01, 709/224, 709/217, 709/249, 710/131, 370/218, 370/219, 370/220, 370/233, 370/234, 370/241, 370/244, 370/250, 370/360

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> 5101402	March 1992	Chiu et al.	370/17
<input type="checkbox"/> 5231593	July 1993	Notess	364/550
<input type="checkbox"/> 5251152	October 1993	Notess	364/550
<input type="checkbox"/> 5274631	December 1993	Bhardwaj	370/60
<input type="checkbox"/> 5305305	April 1994	Harper et al.	370/13
<input type="checkbox"/> 5521907	May 1996	Ennis, Jr. et al.	370/17
<input type="checkbox"/> 5530842	June 1996	Abraham et al.	395/500

<input type="checkbox"/>	<u>5572674</u>	November 1996	Ernst	395/200.1
<input type="checkbox"/>	<u>5586251</u>	December 1996	Coleman et al.	395/183.19
<input type="checkbox"/>	<u>5590120</u>	December 1996	Vaishnavi et al.	370/254
<input type="checkbox"/>	<u>5606664</u>	February 1997	Brown et al.	395/200.1
<input type="checkbox"/>	<u>5621664</u>	April 1997	Phaal	364/551.01
<input type="checkbox"/>	<u>5649107</u>	July 1997	Kim et al.	395/200.11
<input type="checkbox"/>	<u>5715247</u>	February 1998	Nara et al.	370/360
<input type="checkbox"/>	<u>5717858</u>	February 1998	Shtayer et al.	395/200.11
<input type="checkbox"/>	<u>5751698</u>	May 1998	Cushman et al.	370/252
<input type="checkbox"/>	<u>5764626</u>	June 1998	VanDervort	370/232
<input type="checkbox"/>	<u>5790786</u>	August 1998	Wakeman et al.	395/200.02
<input type="checkbox"/>	<u>5802040</u>	September 1998	Park et al.	370/232
<input type="checkbox"/>	<u>5838677</u>	November 1998	Kozaki et al.	370/389
<input type="checkbox"/>	<u>5867483</u>	February 1999	Ennis, Jr. et al.	370/252
<input type="checkbox"/>	<u>5887000</u>	March 1999	Adachi et al.	714/712

OTHER PUBLICATIONS

"Axon Tackles Switch Traffic Monitoring" by Claudia Graziano, Lantimes Online Apr. 24, 1995.
Market Data: IDC 1995 Worldwide Hub and LAN Switch Market Share, 3COM IDC 1995.
HP J2980A AdvanceStack 10/100 LAN Switch-16.

ART-UNIT: 278

PRIMARY-EXAMINER: Maung; Zarni

ASSISTANT-EXAMINER: Najjar; Saleh

ATTY-AGENT-FIRM: Cockburn; Joscelyn G.

ABSTRACT:

A Local Area Network (LAN) Switch includes conventional switching functions and integrated Remote Monitoring (RMON) Universal Feature Card (UFC). The UFC allows simultaneously statistically monitoring the traffic on all ports, 100% monitoring of the traffic on one port, and monitoring the internal LAN Switch switching fabric to obtain RMON statistics about the operation of networks attached to the LAN Switch.

20 Claims, 8 Drawing figures

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L1: Entry 2 of 3

File: USPT

Aug 22, 2000

US-PAT-NO: 6108782

DOCUMENT-IDENTIFIER: US 6108782 A

TITLE: Distributed remote monitoring (dRMON) for networks

DATE-ISSUED: August 22, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fletcher; Rick	San Jose	CA		
Banthia; Prakash	Santa Clara	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
3COM Corporation	Santa Clara	CA			02

APPL-NO: 08/ 882207 [PALM]

DATE FILED: June 24, 1997

PARENT-CASE:

This application claims priority from provisional patent application 60/040,876, filed Mar. 21, 1997 now expired abandoned. This application is a continuation-in-part of Ser. No. 08/766,274LE A1EU ()757 Pk2-D15 306-3101, filed Dec. 13, 1996 now abandoned.

INT-CL: [07] H04 L 9/00, G06 F 11/30

US-CL-ISSUED: 713/153; 713/201, 713/202, 709/224, 709/235, 370/245, 370/252

US-CL-CURRENT: 713/153; 370/245, 370/252, 709/224, 709/235, 713/201, 713/202

FIELD-OF-SEARCH: 709/224, 709/235, 709/227, 709/230, 709/248, 370/252, 370/241, 370/245, 713/201, 713/202, 713/151, 713/153, 713/160, 713/162

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U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4817080</u>	March 1989	Soha	370/252
<input type="checkbox"/>	<u>5251152</u>	October 1993	Notess	709/224
<input type="checkbox"/>	<u>5450601</u>	September 1995	Okuda	709/224
<input type="checkbox"/>	<u>5781703</u>	July 1998	Desai et al.	706/50
<input type="checkbox"/>	<u>5961596</u>	October 1999	Takubo et al.	709/224

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 573 248 A1	December 1993	EP	
0 726 664 A2	August 1996	EP	
WO 96/38955	December 1996	WO	

OTHER PUBLICATIONS

Greenfield, "Network Management Filters Down to the Desktop," Data Communications, vol. 20, No. 13, Sep. 1991, pp. 39, 40, 42.

Jander, "Midlevel Managers Ease SNMP Information Overload," Data Communications, vol. 22, No. 17, Nov. 1993, pp. 53, 54, 56, 58.

Jander, "Lightening the Load on Management Stations," Data Communications, vol. 23, No. 9, Jun. 1994, pp. 45, 46.

Johnson, "A three-Layered Solution for Managing the Enterprise," Data Communications, vol. 24, No. 8, Jun. 1995, pp. 41, 42.

Larsen, "Mastering Distributed Domains via the Web," Data Communications, vol. 25, No. 7, May 1996, pp. 36, 38.

Lee, "A Distributed Network Management System," Proceedings of the Global Telecommunications Conference, San Francisco, CA, Nov. 28-Dec. 2, 2994, vol. 1, Nov. 1994, Institute of Electronics Engineers, pp. 548-552.

Roberts, "RMON Adapters Shed Light on LAN's," Data Communications, vol. 25, No. 6, May, 1996, pp. 43, 44.

Schwager, "Remote Network Monitoring MIB," Annual Review of Communications, National Engineering Consortium, Chicago, IL, vol. 46, Jan. 1992, pp. 752-754.

Stallings, "Patching the Cracks in SNMP," Byte, vol. 21, No. 8, Aug. 1996, pp. 55-56.

ART-UNIT: 277

PRIMARY-EXAMINER: Barron, Jr.; Gilberto

ATTY-AGENT-FIRM: Wagner Murabito & Hao LLP

ABSTRACT:

Distributed remote monitoring (dRMON) of network traffic and performance uses distributed nodes to collect traffic statistics at distributed points in the network. These statistics are forwarded to collectors which compile the statistics to create combined views of network performance. A collector may mimic a prior art, non-distributed, network probe and may interact with network management software as though it were a stand alone network probe thereby simplifying a user's interaction with the distributed system. The invention is designed to work in accordance with a variety of standard network management protocols including SNMP, RMON, and RMON2 but is not limited to those environments. The invention has applications in a variety of communication system environments including local area networks, cable television distribution systems, ATM systems, and advanced telephony systems. A specific embodiment of the invention solves is particularly optimized to work in LAN environments with end systems running under Windows-compatible network operating systems.

26 Claims, 11 Drawing figures

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L1: Entry 3 of 3

File: USPT

Aug 18, 1998

US-PAT-NO: 5796721

DOCUMENT-IDENTIFIER: US 5796721 A

**** See image for Certificate of Correction ****

TITLE: Method and system for monitoring fieldbus network with dynamically alterable packet filter

DATE-ISSUED: August 18, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gretta, Jr.; Robert E.	Austin	TX		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
National Instruments Corporation	Austin	TX			02

APPL-NO: 08/ 666117 [PALM]

DATE FILED: June 21, 1996

INT-CL: [06] H04 J 3/14, G06 F 11/00

US-CL-ISSUED: 370/245; 395/184.01, 364/551.01

US-CL-CURRENT: 370/245; 702/122, 702/190, 714/47

FIELD-OF-SEARCH: 370/241, 370/245, 370/252, 370/469, 371/20.1, 395/185.01, 395/185.1, 395/184.01, 364/551.01, 364/552, 345/339, 345/340

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>5134574</u>	July 1992	Beaverstock et al.	364/551.01
<input type="checkbox"/>	<u>5375070</u>	December 1994	Hershey et al.	364/550
<input type="checkbox"/>	<u>5437009</u>	July 1995	Lane	345/349
<input type="checkbox"/>	<u>5442639</u>	August 1995	Crowder et al.	371/20.1
<input type="checkbox"/>	<u>5568471</u>	October 1996	Hershey et al.	370/245

OTHER PUBLICATIONS

Fieldbus Foundation Fieldbus Specification System Architecture, By Fieldbus Foundation, Aug. 28, 1995, pp. 1-40.

ART-UNIT: 271

PRIMARY-EXAMINER: Jung; Min

ATTY-AGENT-FIRM: Conley, Rose & Tayon Hood; Jeffrey C.

ABSTRACT:

An improved system and method for monitoring a fieldbus network. The improved method and monitor utilize multiple filters with the capability of simultaneously capturing packets from more than one fieldbus and the ability to apply multiple filters to any single fieldbus. Filtered packets are captured as capture documents and stored in the monitor's memory storage. Filtered packets can be displayed, in real time, on the monitor's display screen. The improved monitor is configured to perform post-capture filtering of captured packets. Post-capture filtering does not destroy data. The improved monitor permits dynamic altering of filter settings. Using this feature, the user can initiate capture using a first filter settings, alter the filter setting while packets are being captured, and apply the altered filter setting to the fieldbus without terminating capture. The altered filtered settings are applied to the fieldbus substantially instantaneously and the packets captured under the altered filter settings are displayed.

10 Claims, 17 Drawing figures

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